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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,516

10/17/2005

Vilho Nissinen

Bergpat-10

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STIENNON & STIENNON
612 W. MAIN ST., SUITE 201
P.O. BOX 1667
MADISON, WI 53701-1667

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,516	Applicant(s) NISSINEN ET AL.	
	Examiner YEWEBDAR T. TADESSE	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-38 is/are pending in the application.
- 4a) Of the above claim(s) 28-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-27 and 33-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/25/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 11-27, 32-38, drawn to an apparatus, which is an array of nozzles.

Group II, claim(s) 28-31, drawn to a method of coating a paper web.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of an array of a plurality of high-pressure secondary spray nozzles, this technical feature is not a special technical feature as it does not make a contribution over the prior art in view of US 6,063,450, which teaches an array of nozzles with a V-shaped groove for spraying a web at high-pressure.

3. During a telephone conversation with Patrick Stiennon on January 29, 2009 a provisional election was made without traverse to prosecute the invention of Group I, claims 11-27 and 32-38. Affirmation of this election must be made by applicant in

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replying to this Office action. Claims 28-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 11-13, 19-20, 27 and 33 is rejected under 35 U.S.C. 102(b) as being anticipated by Brooks et al (US 4,282,533).

With respect to claims 11-13, 19-20 and 33, Brook et al discloses (see Figs 1, 8 and 10 and column 4, line 6 –column 5, line 26) an array of spray nozzles (a plurality of aligned nozzles for use in inkjet printing system) for coating a web material at a high-pressure, the array of nozzles comprising: at least one row of a plurality of nozzles; wherein each nozzle is comprised of a tapered duct ending in a closed tip in which a V-shaped groove (21) has been machined, the V-shaped groove defining a nozzle orifice

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(22) defining an oval transverse area, the nozzle orifice arranged to form a jet of coating material; wherein the V-shaped groove has a first side and second side which intersect to define an angle less than 60 degrees (between 25 to 50 or 35-45 degrees; see also Figs 6-7), each nozzle comprises a preliminary nozzle and a secondary nozzle connected to each other (see Fig 10), the preliminary nozzle having an expanding duct (see Fig 8) and a flow orifice; and wherein the flow orifice capable of receiving a supply of coating at the claimed pressure.

As to claim 27, in Brook et al the web material is a paper.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 11-27 and 33-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernert et al (Us 6,063,450).

Bernert et al discloses (see Figs 2-4 and 7) an array of spray nozzles for coating a web material at a high pressure, the array of nozzles comprising: at least one row of a plurality of nozzles (see Fig 7); wherein each nozzle is comprised of a tapered duct ending in a closed tip in which a V-shaped groove has been machined, the V-shaped groove defining a nozzle orifice defining an oval transverse area, the nozzle orifice arranged to form a jet of coating material; the nozzle comprises a preliminary nozzle and a secondary nozzle connected to each other (see Fig 3), the preliminary nozzle having an expanding duct a flow orifice (see Fig 3); and wherein the flow orifice is capable of receiving a supply of coating at the claimed pressure. Bernert et al lacks teaching the specific sizes, diameters and angles and areas of the orifices. It would have been an obvious matter of design choice to size the V-shaped groove and orifices, since such a modification would have involved a mere change in the size of a component. A change of size is generally recognized as being within the ordinary level of skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

10. Claims 14-26 and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brooks et al (US 4,282,533).

Brook et al lacks teaching the specific sizes, diameters and areas of the orifices. It would have been an obvious matter of design choice to size the orifices as desired since such a modification would have involved a mere change in the size of a

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component. A change of size is generally recognized as being within the ordinary level of skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YEWEBDAR T. TADESSE whose telephone number is (571)272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yewebdar T Tadesse/
Primary Examiner, Art Unit 1792